

45389.00004.UTL

IN THE UNITED STATES PATE	NT AND TRADEMARK OFFICE
In re the Application of:) Group Art Unit: 2631
Ismail Lakkis)) Examiner: To Be Assigned
Serial No.: 10/010,601) Customer No.: 36183
Filed: December 06, 2001)
For: SYSTEMS AND METHODS FOR WIRELESS COMMUNICATIONS OVER A WIDE BANDWIDTH CHANNEL USING A PLURALITY OF SUBCHANNELS))
TRANSMITT	AL LETTER
Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	
Sir:	
Enclosed are the following documents:	
- Information Disclosure Statement	•
- Form PTO/SB/08A with copies of	11 References; and
- Return Postcard;	
No fee is believed due with this submission	; however, the Commissioner is authorized to
charge any fee required to our Deposit Account No	. 50-2613.
CERTIFICATE (37 C.F.R	
I hereby certify that this paper (along with anything referred to as being attaction the date shown below with sufficient postage as First Class Mail in an envalue Alexandria, VA 22313-1450.	velope addressed to the Commissioner for Patents, P.O. Box 1450,
	Name of Person Mailing Paper Sinsty Lasher
actober 20, 2004	Dintalle Or La Mass
Date of Deposit SAN/100094-1	Signature of Person Marling Paper

Respectfully submitted,

PAUL, HASTINGS, JANOFSKY & WALKER LLP

By:

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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For: SYSTEMS AND METHODS FOR WIRELESS COMMUNICATIONS OVER A WIDE BANDWIDTH CHANNEL USING A PLURALITY OF SUB-CHANNELS)))
INFORMATION DISCL	OSURE STATEMENT
Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	
Sir:	
In compliance with the Applicant's duty und	er 37 CFR § 1.56, the following information is
brought to the attention of the Examiner.	
CERTIFICATE (37 CFR	
I hereby certify that this paper (along with any referred to as b United States Postal Service on the date shown below with sur addressed to the Commissioner for Patents, P.O. Box 1450, A	fficient postage as First Class Mail in an envelope
	Name of Person Delivering Paper
	Name of Person Delivering Paper
October 20, 2004	Timo Jalu
Date of Delivery	Signature of Person Delivering Paper

	REPRESENCES
\boxtimes	The references are listed on the attached Form PTO/SB/08a and copies are enclosed for the
conve	nience of the Examiner.
	Copies of the references listed on the attached Form PTO/SB/08a have already been
submit	tted in corresponding Patent Application No and therefore, copies of the same are
not en	closed.
	Copies of U.S. Patent documents are <u>not</u> enclosed herewith.

The items identified in this Information Disclosure Statement may or may not be "material" pursuant to 37 CFR § 1.56 and the submission thereof by Applicant shall not be construed as an admission that any such patent, publication or other information referred to therein is material or considered to be material (37 CFR § 1.97(h)), or even qualifies as "prior art" 35 USC § 102 with respect to this invention unless specifically designated by Applicant as such.

The filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information, as defined in 37 CFR § 1.56, exists.

DISCLOSURE

The attached IDS is being filed in accordance with 37 CFR §§ 1.97 and 1.98. This IDS is
believed to be timely in that it is being submitted under 37 CFR § 1.97(b)(3), that is before the mailing of
a first Office Action on the merits. Thus, no petition or fee is required. However, if the undersigned
representative of Applicant is in error in this regard, then the Examiner is requested to consider this IDS
as filed under § 1.97(c)
The attached Information Disclosure Statement is being filed in accordance with 37 CFR
§§ 1.97(c) and 1.98. This IDS is being filed after an action on the merits but before a Final Action under
§ 1.113 or a Notice of Allowance under § 1.311. In the event that this IDS is not received before a Final
Action under § 1.113 or a Notice of Allowance under § 1.311, the Applicant respectfully requests the
filing of these papers to be considered a petition requesting consideration of this IDS pursuant to 37 CFR
§ 1.97(d).
The attached Information Disclosure Statement is being filed in accordance with 37 CFR
§§ 1.97(d) and 1.98. This IDS is being filed after receipt of a final action but before receipt of a Notice of
Allowance Under §1.311.

Statement Under 37 C.F.R. 1.97(e)(1) and 1.97(e)(2)
I certify that pursuant to 37 CFR 1.97(e)(1), each item of information contained in this
Information Disclosure Statement was first cited in any communication from a foreign patent office in a
counterpart foreign application not more than three months prior to the filing of the Information
Disclosure Statement.
I certify that pursuant to 37 CFR 1.97(e)(2), no item of information contained in this Information
Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign
application, and, to the best of my knowledge, no item of information contained in this Information
Disclosure Statement was known to any individual more than three months prior to the filing of this
Information Disclosure Statement.
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Enclosed is a check to cover the fee pursuant to 37 CFR § 1.17(p). The Examiner is hereby authorized to charge any fee due with this filing to our Deposit
Enclosed is a check to cover the fee pursuant to 37 CFR § 1.17(p). The Examiner is hereby authorized to charge any fee due with this filing to our Deposit Account No. 50-2613.
Enclosed is a check to cover the fee pursuant to 37 CFR § 1.17(p). The Examiner is hereby authorized to charge any fee due with this filing to our Deposit Account No. 50-2613. The Examiner is hereby authorized to charge any additional fee(s) required by this paper to

Respectfully submitted,

PAUL, HASTINGS, JANOFSKY & WALKER

By:

Noel C. Gillespie

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Dated:

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Sheet

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known				
Application Number	10/010,601			
Filing Date	December 06, 2001			
First Named Inventor	Lakkis, Ismail			
Group Art Unit	2631			
Examiner Name	To Be Assigned			
Attorney Docket Number	45389.00004.UTL			

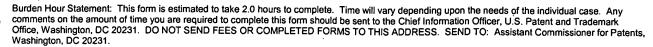
				U.S. PATENT DOCU	MENTS				
Examiner Initials*	aminer Cite			U.S. Patent Document Number Kind Code ² (If known)		Name of Patentee or Applicant of Cited Document	Cited Document Passages or Relevant	e of Patentee or Cited Document Where Relevant	
	AA	5,563,909		Nakazawa	10-08-1996				
	AB	5,675,572		Hidejima et al.	10-07-1997				
	AC 5,949,813		Hunsinger et al.	10-07-1999					
	AD	6,049,707		Buer et al.	04-11-200				
	AE	6,192,068 B1		Fattouche, et al.	02-20-2001				
	AF	6,320,897 B1		Fattouche	11-20-2001				
	AG	RE37,802 E		Fattouche	07-23-2002				

				FOREIGN PAT	TENT DOCUMENTS	3		
Examiner Initials	Cite No. ¹	Office ³	Foreign Patent Doc Number ⁴	ument Kind Code ³ (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
1	АН	BINGHAM, JOHN A.C. "Multicarrier Modulation for Data Transmission: An Idea Whose Time Has Come" IEEE Communications Magazine, May 1990, Pages 5-14.	
	AI	BLUM, RICK S. et al. "Improved Space – Time Coding for MIMO-OFDM Wireless Communications" IEEE Transactions on Communications, Vol. 49, No. 11, November 2001, pp. 1873-1878.	
	AJ	CHAUNG, JUSTIN et al. "Beyond 3G: Wideband Wireless Data Access Based on OFDM and Dynamic Packet Assignment" IEEE Communications Magazine, July 2000, pages 78-87.	
	AK	EDFORDS, OVE et al. "An introduction to orthogonal frequency-division multiplexing" September 1996, pp. 1-50	

Examiner	Date
Signature	Considered

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.



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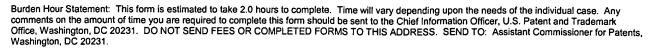
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Substitute for form 1449A/PTO				Complete if Known		
•	NEODMATION	א טופכו	OSLIDE	Application Number	10/010,601	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Filing Date	December 06, 2001	
				First Named Inventor	Lakkis, Ismail	
				Group Art Unit	2631	
				Examiner Name	To be assigned	
Sheet 2 of 2		Attorney Docket Number	45389.00004.UTL			

NON PATENT LITERATURE DOCUMENTS							
Examiner nitials	Cite No.1						
	AL	FOERSTER, JEFF et al. "Intel CFP Presentation for UWB PHY" IEEE P802.15 Working Group for Wireless Personal Area Networks, IEEE 802.15-03/109, March 03, 2003, pp. 1-53.					
	AM	KELLY, JOY "Multi-band OFDM Physical Layer Proposal Update" IEEE P802.15 Working Group for Wireless Personal Area Networks, IEEE 802.15-04/0122r4, March 15, 2004, pp. 1-26.					
	AN	LEEPER, DAVID G. "Wireless Data Blaster: Radio's oldest technology is providing a new way for portable electronics to transmit large quantities of data rapidly without wires" Scientific American, May 2002, Pages 64-69.					
	AO	PATTAN, BRUNO "A Brief Exposure to Ultra-Wideband Signaling" Microwace Journal, December 2003, pages 1-5.					
	AP	VANDANAMEELE, PATRICK et al. "A Combined OFDM/SDMS Approach" IEEE Journal on Selected Areas in Commmunications, November 2000, pp. 1-27.					
	AQ	WONG, CHEONG YUI et al. "Multiuser OFDM with Adaptive Subcarrier, BIT, and Power Allocation" IEEE Journal on Selected Areas in Communications, Vol. 17, No. 10, October 1999, pp. 1747-1758.					
-	AR	YE, ZHONG et al. "Throughput Analysis for a Packet Radio Network Using Rate Adaptive OFDM Signaling" IEEE International Conference on Communications, June 1999, pp. 1-7.					

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Examiner	Date		•
Signature	 Consid	dered	
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